

C L A I M S

1. In a nonaqueous electrolyte secondary battery using
a material capable of storing and releasing lithium as the
5 negative electrode material and a lithium transition metal
complex oxide containing Ni and Mn as the transition metal and
having a layered structure as the positive electrode material,

10 said secondary battery being characterized in that said
lithium transition metal complex oxide has a BET specific surface
area of less than 3 m²/g and gives a pH value of not greater
than 11.0 when it is immersed in purified water in the amount
of 5 g per 50 ml of the purified water.

15 2. The nonaqueous electrolyte secondary battery as recited
in claim 1, characterized as using an outer casing susceptible
to deformation in case of internal pressure buildup within the
battery.

3. The nonaqueous electrolyte secondary battery as recited
in claim 2, characterized in that said internal pressure buildup
is caused by a gas generated within the battery during storage.

20 4. The nonaqueous electrolyte secondary battery as recited
in claim 2 or 3, characterized in that said outer casing is composed
at least partly of an aluminum alloy or aluminum laminate film
having a thickness of up to 0.5 mm.

25 5. The nonaqueous electrolyte secondary battery as recited
in any one of claims 1 - 4, characterized in that said lithium

transition metal complex oxide is represented by the formula $Li_aMn_xNi_yCo_zO_2$ (wherein a, x, y and z are numbers satisfying $0 \leq a \leq 1.2$, $x + y + z = 1$, $x > 0$, $y > 0$ and $z \geq 0$).

6. The nonaqueous electrolyte secondary battery as recited
5 in any one of claims 1 - 5, characterized in that said lithium
transition metal complex oxide contains substantially the same
amount of nickel and manganese.

7. The nonaqueous electrolyte secondary battery as recited
in any one of claims 1 - 6, characterized in that said lithium
10 transition metal complex oxide has a BET specific surface area
of not greater than $2 \text{ m}^2/\text{g}$.